

#### IN THE SPECIFICATION

It is noted that the Paragraphs beginning on Page 46, in line 3, and on Page 47 beginning in Line 27 and continuing onto page 48 are missing symbols for the complex dielectric components.

PLEASE AMEND THE PARAGRAPH BEGINNING IN LINE 3 ON PAGE 46 TO READ:

When investigating the (110) orientation optically thick material system, when electromagnetic beam plane of incidence orientations #1 and #2 were utilized to place the plane of incidence along the optic axis and perpendicular thereto, no conversion between p and s polarizations occur. As a result measurement of the diagonal terms of a reflection Jones matrix using standard ellipsometric measurement was sufficient. Respective ellipsometric PSI and DELTA Spectra, (where the angle of incidence of the electromagnetic beam was 72 degrees), for the orientation #1 are shown in Figs. 6a1 & 6a2, and for orientation #2 are shown in Figs. 6b1 & 6b2. When orientation #3 was utilized anisotropic ellipsometric PSI and DELTA data were acquired and are shown in Figs. 6c1 and 6c2. Data acquired and demonstrated in Figs. 6a1 - 6c2 were simultaneously applied in a wavelength by wavelength regression fit to provide the real and imaginary sc and pc dielectric function values. Determined complex dielectric components ( $\epsilon_2$ ) and ( $\epsilon_1$ ) for sc are shown in Figs. 6d1 & 6d2, and complex dielectric components ( $\epsilon_2$ ) and ( $\epsilon_1$ ) for pc are shown in Figs. 6e1 & 6e2. Said results were found to be Kramers-Kroenig consistent where values for "offset",  $E_c$  and  $A$ , (see Kramers-Kroenig equation in the Background Section),

were evaluated to be:

**Best-fit parameters for Kramers-Kronig conversion of  $\epsilon_2$  to  $\epsilon_1$  for (110) sample.**

Parameters for K-K fit	$\epsilon_{1-sc}$	$\epsilon_{1-pc}$
<i>offset.</i>	$5.72 \pm 0.02$	$5.47 \pm 0.02$
$E_c$	$0.0226 \pm 0.0001$	$0.0226 \pm 1 \times 10^{-4}$
$A$	$2.403 \pm 0.03$	$3.83 \pm 0.03$

PLEASE AMEND THE PARAGRAPH BEGINNING IN LINE 27 ON PAGE 47 TO  
READ:

In the case of the (111) sample, the "c" axis is not parallel to the (x-y) plane (ie. in-plane), or perpendicular thereto. Measurements were obtained with the plane of incidence oriented at four different locations, (eg. at -109, -18.8, -66.1 and 21.54 degrees rotation of the optically thick material system around a perpendicular to an alignment surface thereof). Measurements at three of the orientations were obtained using 72 degrees angle of incidence, and at one orientation, (ie. the 21.54 degrees rotation), data was obtained using 30 and 55 degrees angles of incidence. Figs. 8a1, 8b1, 8c1, and 8d1, show corresponding ellipsometric PSI results, and Figs. 8a2, 8d2, 8c2 and 8d2 show corresponding ellipsometric DELTA values. Data acquired and demonstrated in Figs. 8a1 - 8d2 were simultaneously applied in a wavelength by wavelength regression fit to provide the real and imaginary sc and pc dielectric function values. Determined complex dielectric components ( $\epsilon_2$ ) and ( $\epsilon_1$ ) for sc are shown in Figs. 8e1 & 8e2, and complex dielectric components ( $\epsilon_2$ ) and ( $\epsilon_1$ ) for pc are shown in Figs. 8f1 & 8f2.

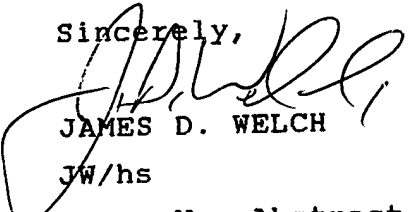
Said results were found to be Kramers-Kroenig consistent where values for "offset",  $E_c$  and  $A$ , (see Kramers-Kroenig equation in the Background Section), were evaluated to be:

**Best-fit parameters for Kramers-Kronig conversion of  $\epsilon_2$  to  $\epsilon_1$  for (111) sample.**

Parameters for sample (111) K-K fit	$\epsilon_{1-sc}$	$\epsilon_{1-pc}$
<i>offset.</i>	$5.53 \pm 0.04$	$6.7 \pm 0.2$
$E_c$	$0.0289 \pm 0.0001$	$0.0244 \pm 0.0007$
$A$	$2.50 \pm 0.02$	$3.2 \pm 0.2$

It is now believed that the Application is in order to be Issued. The Examiner is therefore respectfully requested to provide the Notice of Allowance. Should problems remain, please contact Attorney Welch at the letterhead location.

Sincerely,



JAMES D. WELCH

JW/hs

enc. New Abstract.